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Introduction

This document serves as a reference for the processes by which Telecommunications Companies (TCs) and Bell Atlantic communicate about changes to the collection of interfaces which enables the relationship between Bell Atlantic, as a provider of resold telecommunications services, unbundled network elements (UNE), and facilities, as applicable, and the telecommunications carrier (TC) as a consumer of these services. This relationship includes the business processes of pre-ordering, ordering, trouble reporting and maintenance, and billing. As with any deployed business process enabled by operational support systems, as the process evolves the associated computer systems and business practices which directly affect the interface may be changed to accommodate it. For the relationship between TCs and Bell Atlantic these changes involve Bell Atlantic systems and the interfaces to these systems. The Change Management Process described in this document describes how Bell Atlantic and TCs will work together in implementing such changes.

The business processes of operational support systems change control is a highly complex one, and therefore, the time frames presented in this document are illustrative only.

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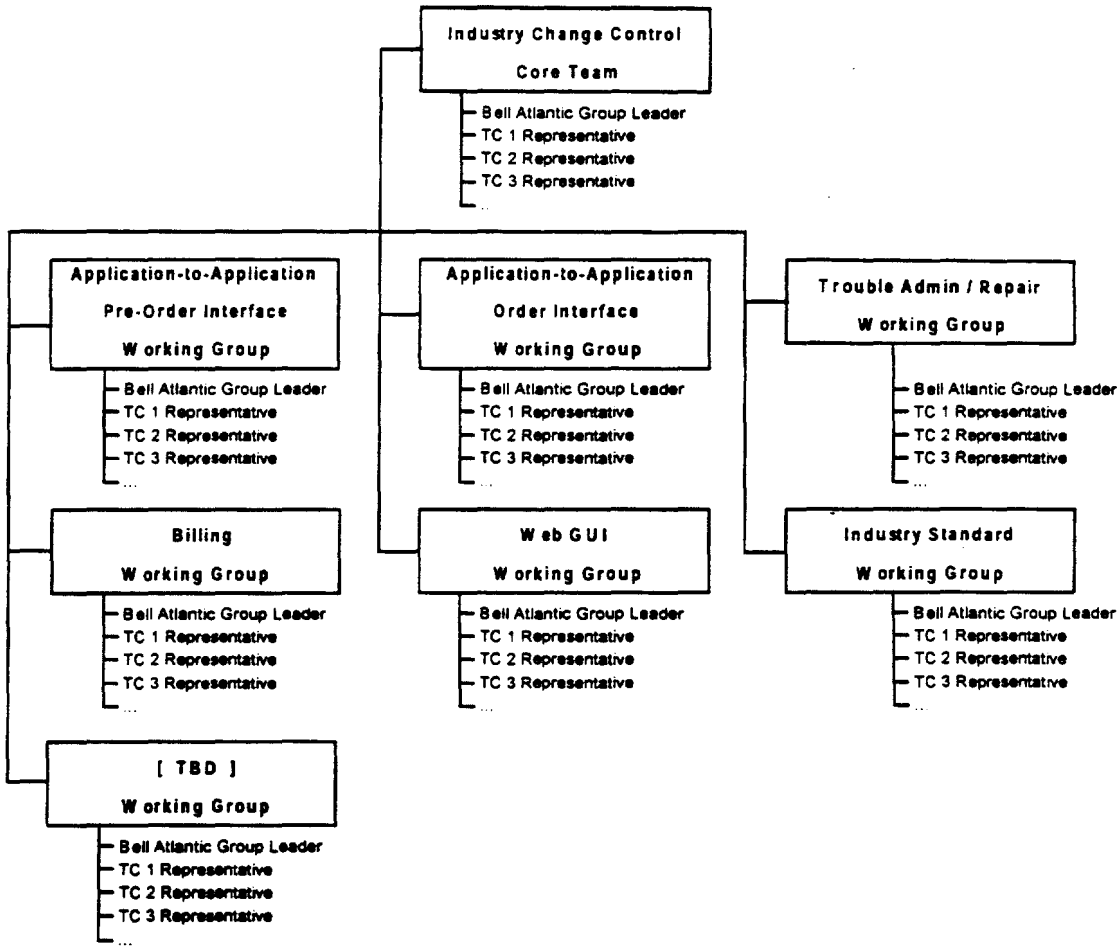
Bell Atlantic Change Control Organization Structure



The Bell Atlantic Organization is led by the "Core Team" which is composed of representatives from Bell Atlantic and the TCs. This "Core Team" meets on a monthly basis at the Industry Change Control Meeting. As issues arise during these meetings, Working Groups, comprised of representatives from Bell Atlantic and the TCs, will be formed to investigate, discuss, and resolve the issues. The Bell Atlantic representative in the Working Group will be responsible for the coordination and facilitation of the Working Group's meetings. Any unresolved issues by the Working Group will be referred to the Core Team for resolution.

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Terms and Definitions

Overview of Terms

The following terms are used throughout this description of Bell Atlantic's TIS Change Management process:

Change Request
A change request is a discrete description for work requested by a TC or Bell Atlantic. Additionally, a change request may be necessitated by out of service conditions or regulatory compliance which identify modifications that affect the interface between Bell Atlantic and TC's. It describes the modifications requested at a level of detail such that all affected parties can analyze, schedule, develop, test, and implement the change. A change request includes information Bell Atlantic would need to develop and implement the change. This information, which should be submitted on the Change Control Request Form (see Appendix A), includes high-level descriptions, jurisdictions affected, timeframe for implementation, reason for request, etc. It also includes the categorization of change type (i.e., Type 1, 2, 3, 4, 5). Bell Atlantic will work with the TCs to categorize the change type. Differences of opinion will be handled on a case-by-case basis.

Telecommunications Carrier (TC)
A TC is any company which purchases resold services, access to unbundled network elements (UNEs), or transport and termination from Bell Atlantic for the purposes of delivering local telecommunications service to an end user. A TC participating in the Change Management Process with Bell Atlantic should designate a representative to this process.

Bell Atlantic Change Control
The organization within Bell Atlantic directing and monitoring the Change Management Process is referred to as Bell Atlantic Change Control. This organization also ensures the requirements of a change request are adequately defined. The group interacts directly with the Bell Atlantic support groups and the TC representatives. The Bell Atlantic Change Control Manager serves as a single point of contact for TCs to this organization.

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Bell Atlantic Support Groups
Bell Atlantic Support Groups are various other organizations working internally at Bell Atlantic to implement aspects of a change request. These groups each have responsibility over the analysis, requirement definition, prioritization, detailed design, implementation, and maintenance of specific internal Bell Atlantic business functions. They are generally not in communication with the TCs directly. These groups include, but are not limited to, Information Systems (IS), Methods and Procedures, and Operations.

Type 5 (TC Originated) Change
Any non-Type 1 (Emergency Maintenance) change affecting interfaces between the TC's and Bell Atlantic's operational support systems which the TC requests Bell Atlantic to implement is a Type 5 change. These changes might reflect a business process improvement which the TC is seeking to implement within its own internal operational support system and that implies a change in the way the TC wishes to interact with Bell Atlantic. This category does not include changes imposed upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or standards organizations (which are Type 3 Changes).

Type 4 (Bell Atlantic Originated) Change
A Type 4 change is one affecting the interfaces between the TC's and Bell Atlantic's operational support systems which Bell Atlantic desires to implement on its own accord. This category does not include changes imposed upon these interfaces by third parties such as regulatory bodies (which are Type 2 Changes) or standards organizations (which are Type 3 Changes).

Type 3 (Industry Standard) Change
Changes to interfaces between the TC's and Bell Atlantic's operational support systems required to bring these interfaces in line with newly agreed upon telecommunications industry guidelines are Type 3 changes. Either Bell Atlantic or the TC may initiate the change request. These guidelines are industry standards defined by any one of a number of administrative bodies or trade groups, such as the Alliance for Telecommunications Industry Solutions (ATIS), the Network Reliability and Interoperability Council (NRIC), American National Standards Institute (ANSI) or the International Telecommunications Union (ITU). Changes made to accommodate industry standards are essentially voluntary, but are undertaken by both the TC and Bell Atlantic in order to keep pace with widespread accepted practices. Standards of particular relevance are those for OSS interfaces and local services ordering as defined by the Ordering and Billing Forum (OBF), EDI standards defined by the Telecommunications Industry Forum (TCIF), and trouble reporting interfaces defined by the Electronic Commerce Interexchange Committee (ECIC).

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Type 2 (Regulatory) Change

Changes to the interfaces between the TC's and Bell Atlantic's operational support systems mandated by regulatory or legal entities, such as the Federal Communications Commission (FCC) or state and federal courts are Type 2 changes. Regulatory changes are not voluntary but are requisite to comply with newly passed legislation, regulatory requirements, or court rulings. Either Bell Atlantic or the TC may initiate the change request.

Type 1 (Emergency Maintenance) Change

A Type 1 change corrects problems discovered in production versions of an application interface. Either Bell Atlantic or the TC may initiate the change request. Typically, this type of change reflects instances where a technical implementation is faulty or inaccurate, such as to cause incorrect or improperly formatted data. Instances where Bell Atlantic or TCs misinterpret interface specifications and/or business rules must be addressed on a case-by-case basis. All parties will take all reasonable steps to ensure that any disagreements regarding the interpretation of a new or modified business process are identified and resolved during Change Management Review of the Change Request. All known discrepancies should be resolved prior to the release of new application code into the production environment. Type 1 changes will be processed on an expedited basis. The timeframe for a Type 1 change is typically hours or days.

Additionally, once a Type 1 change is identified, the Change Management Team must determine the nature and scope of the emergency. Type 1 changes should be categorized in the following manner:

Severity 1: Interface Unusable - Interface discrepancy results in totally unusable interface. TC Orders/Pre-Orders/Maintenance Requests cannot be submitted or will not be accepted by Bell Atlantic or a TC. Manual work-arounds are not feasible. Change is considered essential to continued operation. Bell Atlantic and TCs should work to resolve the discrepancy as quickly as possible.

Bell Atlantic and TCs agree that a process will be developed for handling Type 1 Severity 1 situations. Bell Atlantic will create a proposal for this process and distribute it to the TCs prior to Friday May 29, 1998, addressing any TC input provided by May 22, 1998. Bell Atlantic and the TCs agree to reach consensus on the proposal no later than the June 1998 *Industry Change Control Meeting.*

Severity 2: Interface Affecting - Orders/Pre-Orders/Maintenance Requests require work-around on the part of Bell Atlantic or TC(s). Change is considered critical to operations. Bell Atlantic and TCs should work to resolve the discrepancy in a timely manner.

Severity 3: Process Impacting - Orders/Pre-Orders/Maintenance Requests can be submitted and will be accepted through normal process/interfaces. Clarification is considered critical to ongoing operations. Bell Atlantic should work to provide appropriate documentation on an expedited basis.

Category A Change
Changes which impact interfaces or interface operations are Category A Changes.

Category B Change
Interface changes which impact business processes (applicable to Type 1, Type 4, and Type 5 changes only) are Category B Changes.

Test Suite / Proxy
Bell Atlantic will maintain a base test suite which will include the most common scenarios encountered. This test suite may be expanded based upon the individual change request or a TC's specific request. Also, this does not preclude any TC from individual carrier-to-carrier testing in the Bell Atlantic production environment after implementation of the change. When the final test suite is determined by Bell Atlantic and the TCs, Bell Atlantic and the TCs will mutually agree upon the TC(s) that will submit the associated transactions. If no TCs are ready to participate in the proxy test, Bell Atlantic will conduct the test instead. The results will be available for all TCs to review on an individual basis. Upon successful execution of the test suite, with or without TC proxy participation (even though Bell Atlantic will invite TCs to participate in the testing, it is possible that TCs may decline to take part for a variety of reasons), the release may continue to production. The release will be considered "closed" if no substantive Type 1 changes are reported by the TCs or observed by Bell Atlantic within the 30 day period following implementation of the release.

Version
Version refers to the Industry Standard for order, pre-order, trouble maintenance, and billing in the production environment. Bell Atlantic will maintain two versions of the Industry Standard. These two versions are the sunset and current versions. The sunset version of the interface is maintained until, but not past, the time when a subsequent Industry Standard version is released into production. At that time, what had been the current version becomes the sunset version and the previous sunset version is simultaneously decommissioned.

Release
A release is the implementation of changes into the production environment. Major releases introduces new versions. All other releases are considered Minor releases.

Decommission
As interface changes are implemented into the production systems, the corresponding retirement of previous releases/functionality of the system is referred to as decommission. In the context of Type 3 (Industry Standard) changes, the sunset version of an Industry Standard is decommissioned (see Application-to-Application Availability for further details). Type 4 (Bell Atlantic Originated) and Type 5 (TC Originated) changes are more specific and decommission a particular function. Regarding Type 2 (Regulatory) changes, the decommission of the previous functionality occurs as soon as the regulatory mandated release is implemented, unless otherwise specified by the regulatory requirement. Lastly, for Type 1 (Emergency Maintenance) changes, the decommission of the previous functionality occurs as soon as the maintenance release is implemented.

Industry Change Control Meeting
A monthly meeting occurs to discuss change requests submitted by the TCs, upcoming releases, and future Bell Atlantic systems. All TCs should designate a representative to attend this meeting and become part of the "Core Group". Bell Atlantic is responsible for the meeting agenda, logistics, meeting preparation and facilitation, and distribution of meeting minutes.

Forecasts and Planning Information
In order to facilitate joint planning for long term development between Bell Atlantic and the TCs and production support capacity plans, two forecasts and specifications will be shared. Once per quarter, Bell Atlantic will provide a long term forecast covering the next six to nine months including high level estimates of when Bell Atlantic intends to release, upgrade or retire its various operational support systems. At the same time, Bell Atlantic will provide a nearer term outlook with a high level description of the items to be released in the next three to four months. Included in this outlook will be details of OSS interface affecting changes, TC requested changes, and flow-through changes. On a planning basis, Bell Atlantic will provide the specifications, testing, etc. (refer to process flow text descriptions for specific items) approximately 66 days prior to implementation. The two forecasts and specifications delivery provide three levels of information to the TCs. The TCs should provide feedback on the six to nine month view and three to four month view within approximately 14 days of receipt indicating their high level intentions and timeframes for making enhancements in their own systems compatible with Bell Atlantic planned releases. Bell Atlantic will maintain the confidentiality of any feedback on the

forecasts provided by the TCs if such information is marked confidential. The feedback mechanism for the 66 day outlook is detailed in the process flow text descriptions.

Change Request Assessment

In the analysis phase of a change request, the TC and Bell Atlantic have 15 business days to review and provide feedback on change requests. However, there is a difference in the type of information being exchanged. The TC provides business level detailed information that initiates the change request. If the change request is incomplete, Bell Atlantic will request additional information as appropriate. Bell Atlantic will evaluate and provide feedback on each request and the information made available within 15 business days of receipt of such information. Bell Atlantic provides implementation level detailed information, such as specifications and testing plans. TC feedback will be considered as agreed to in the Principles of Change Management document and outlined in the process flow descriptions.

Operational Support System (OSS)

OSS is one of the suite of computer systems used within Bell Atlantic. These systems enable the processes associated with Bell Atlantic's traditional retail business as well as its resale, UNE, and facilities businesses, as applicable. TCs do not have direct access to these systems. Rather, access to the functions they perform and the data they maintain is provided through either an application-to-application interface or a user interface system which Bell Atlantic maintains.

Application-to- Application Interface

Electronic gateways that allow the exchange of data between a TC's business computer system and the Bell Atlantic OSS infrastructure are called application-to-application interfaces. Application-to-application interfaces available to TCs include EDI and EIF.

End User Interface

End User Interfaces are electronic gateways (i.e., the Web GUI and ECG) that allow the exchange of data between a TC's representative and the Bell Atlantic OSS infrastructure. Although it is possible for the TC to create a system that interacts with the Web GUI and ECG, Bell Atlantic does not recommend this practice. The limitations imposed by a system interface conflict with the purpose of Bell Atlantic's Web GUI and ECG and consequently hinder the user.

Web GUI (Intranet)

The Web GUI is a graphical user interface which Bell Atlantic makes available to TCs for the delivery of wholesale business transactions. The Web GUI may be used instead of an application-to-application interface at the TC's choice.

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Electronic Communications Gateway (ECG)
ECG is the terminal emulation interface available in the mid-Atlantic states in Bell Atlantic (Delaware, Maryland, New Jersey, Pennsylvania, Virginia, Washington DC, and West Virginia).

Electronic Data Interchange (EDI)
EDI is a forms-based mechanism for sending and receiving data between partners. Standards for the transfer mechanism are maintained by the American National Standards Institute (ANSI).

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Principles of Change Management Definitions

The following definitions have been repeated from the document *Joint CLEC / Bell Atlantic Proposal: Principles of Change Management*, final version January 28, 1998.

Baseline Document
The baseline is the current version of specifications for transactions, data elements, and business rules that impact the OSS interfaces. Changes to that interface, with associated baseline changes, are subject to appropriate review, as described by the CLEC/Bell Atlantic Change Control Review Team (CBRT). The parties recognize that there also may be changes that would impact the interface altering the way a CLEC performs other functions (e.g. billing). These issues are not precluded from CBRT discussion.

Business Rules
Business rules are the various processes and conditions necessary to be operational as a CLEC with Bell Atlantic that impact the interface (e.g. the data elements and data necessary to support a transaction).

Industry Standard
The Alliance for Telecommunications Industry Solutions (ATIS) defined national electronic interface specification.

Interface
The message formats and message exchange protocols that define exchange transactions between CLECs and Bell Atlantic.

Interface Operations
The physical interconnection and services provided via the interface.

Timelines for Typical Changes

Types 1, 2, 3, 4, 5

Classification of a Change by Type (Types 1, 2, 3, 4, and 5) will be jointly determined by Bell Atlantic and TCs. Checkpoints and information exchanges will be used to effectively manage the Change Request Timelines. The testing procedures will be reviewed and agreed to based on the complexity of the change.

High-level Comparison of the Five Change Types

Type 5 - TC Originated

Type 4 - Bell Atlantic Originated

Type 3 - Industry Standard

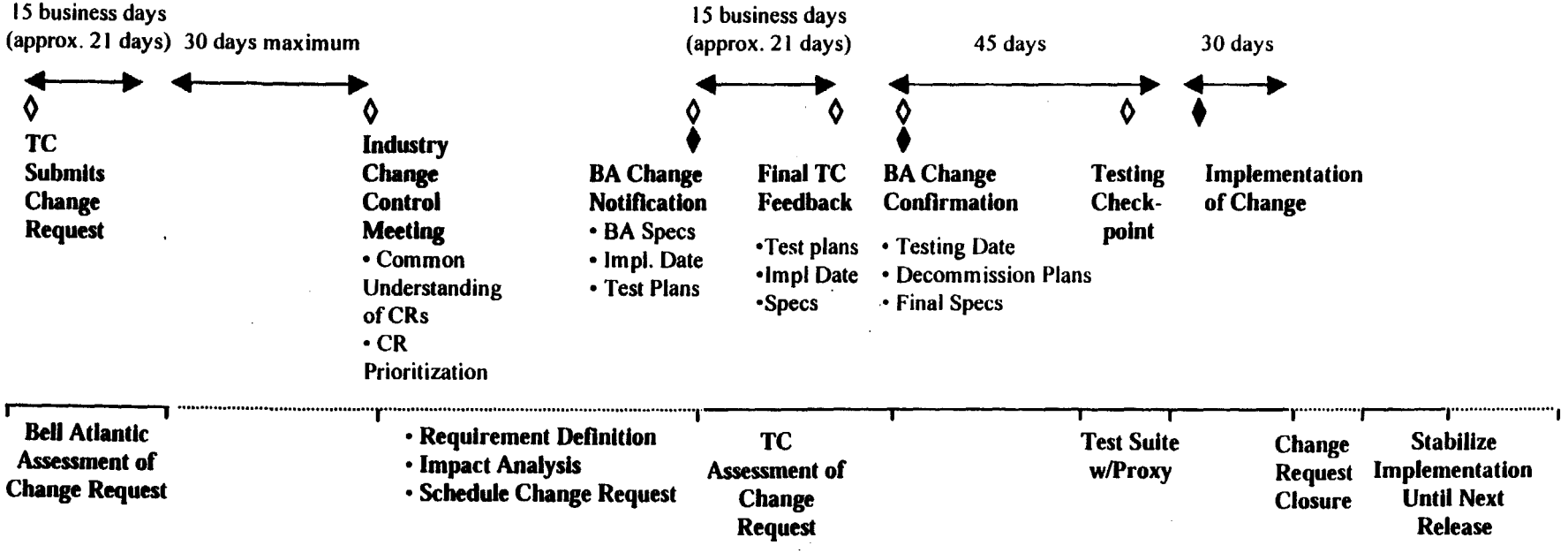
Type 2 - Regulatory

Type 1 - Maintenance

Analysis - Finalization of the Change and determination of the impact to systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.
Sunset - The Change is not current at Bell Atlantic and is being sunset.

* Scheduling for Type 5 Changes is dependent on the individual Change Request.
** The length of time a version is current varies.
*** The current Industry Standard version is typically retired after two subsequent Industry Standard versions are introduced.

Timeline for a Typical Type 5 (TC Originated) Change

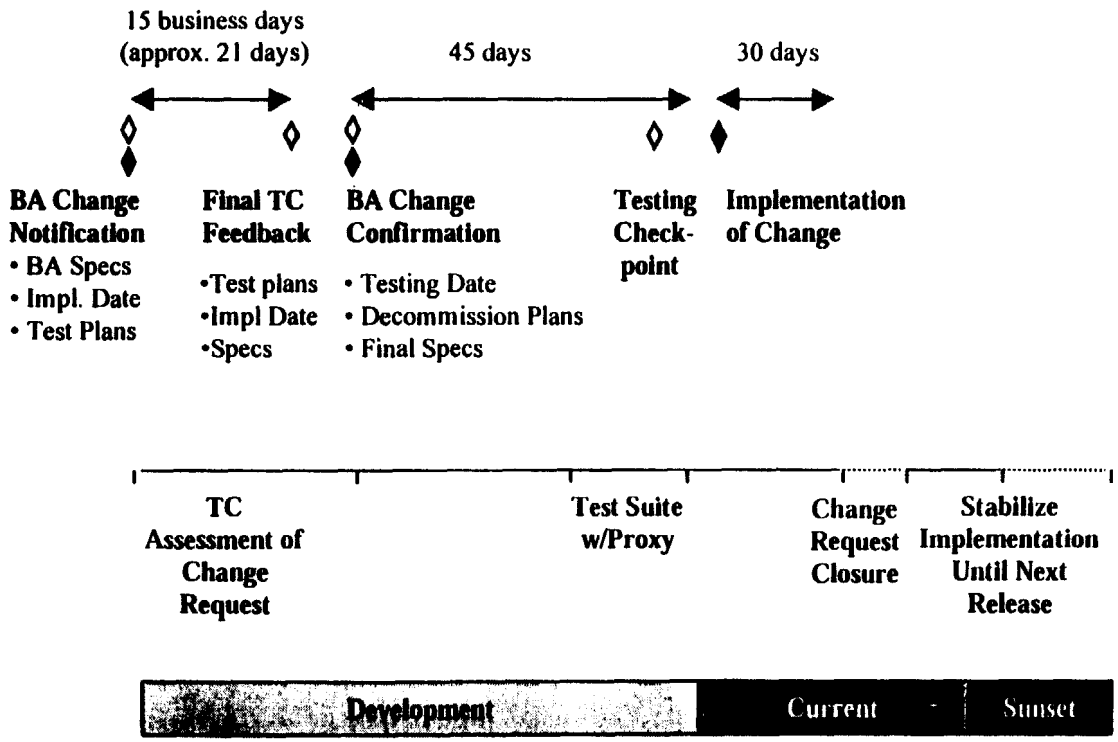


Analysis	Schedule	Development	Current	Sunset

Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation

Analysis - Finalization of the Change and determination of the impact to systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.
Sunset - The Change is not current at Bell Atlantic and is being sunset.

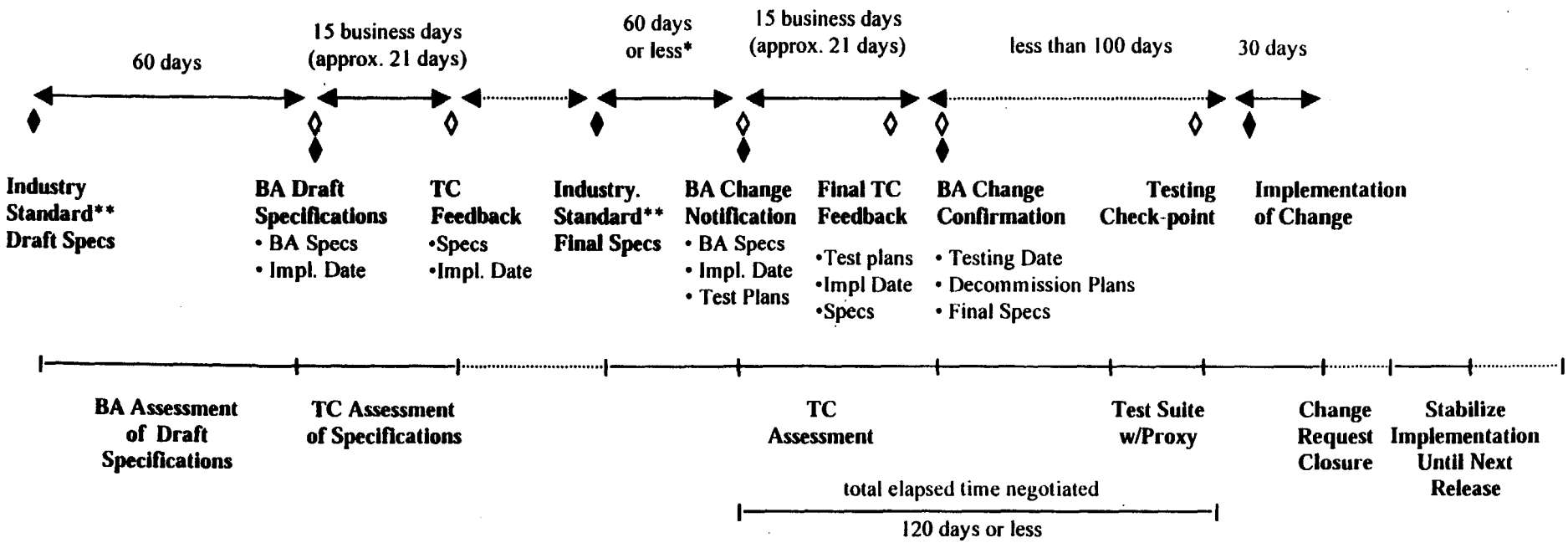
Timeline for a Typical Type 4 (Bell Atlantic Originated) Change



Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation

Development - Bell Atlantic & CLEC systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.
Sunset - The Change is not current at Bell Atlantic and is being sunset.

Timeline for a Typical Type 3 (Industry Standard) Change*

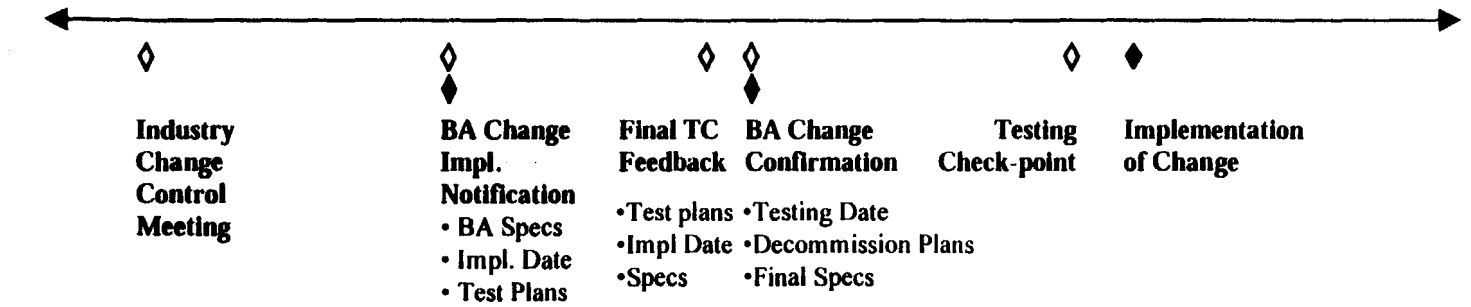


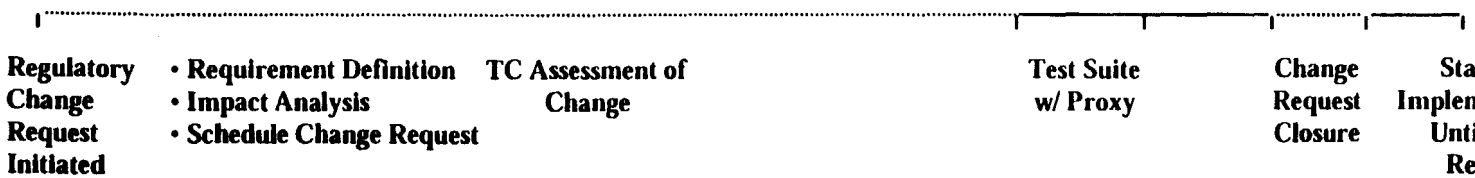
Analysis - Finalization of the Change and determination of the impact to systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.
Sunset - The Change is not current at Bell Atlantic and is being sunset.

* Timeline should be shortened to the extent the Industry Standard Final Specs are similar to the BA Final Specs.
** Industry Standard specifications are generated by ATIS sub-committees such as SOSC, TCIF, and ECIC. The ordering standard that is agreed to by Bell Atlantic and TCs is the SOSC/TCIF technical specifications.

Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation

Timeline for a Typical Type 2* (Regulatory) Change





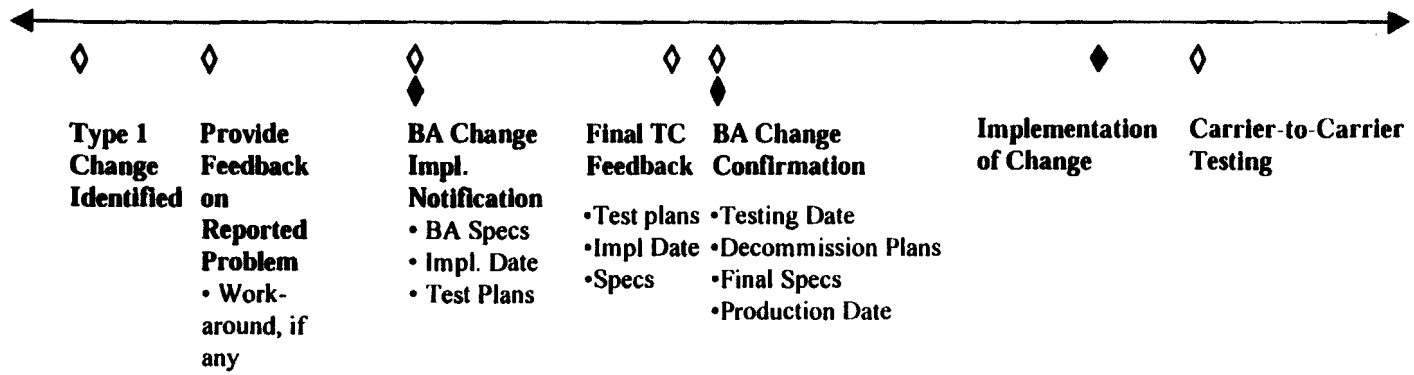
Analysis - Finalization of the Change and determination of the impact to systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.

Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation

* The Timeline for Regulatory Changes will vary based on applicable law/regulatory rules.

Timeline for a Typical Type 1 (Emergency Maintenance) Change

Typically hours or 1 to 2 days, maximum should be 30 days



Emergency Maintenance Change Identified by TC or Bell Atlantic

• Requirement Definition
• Impact Analysis
• Schedule Change Request

TC Assessment of Change

Test Suite w/ Proxy

Analysis	Schedule	Development	Current

Analysis - Finalization of the Change and determination of the impact to BA systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.

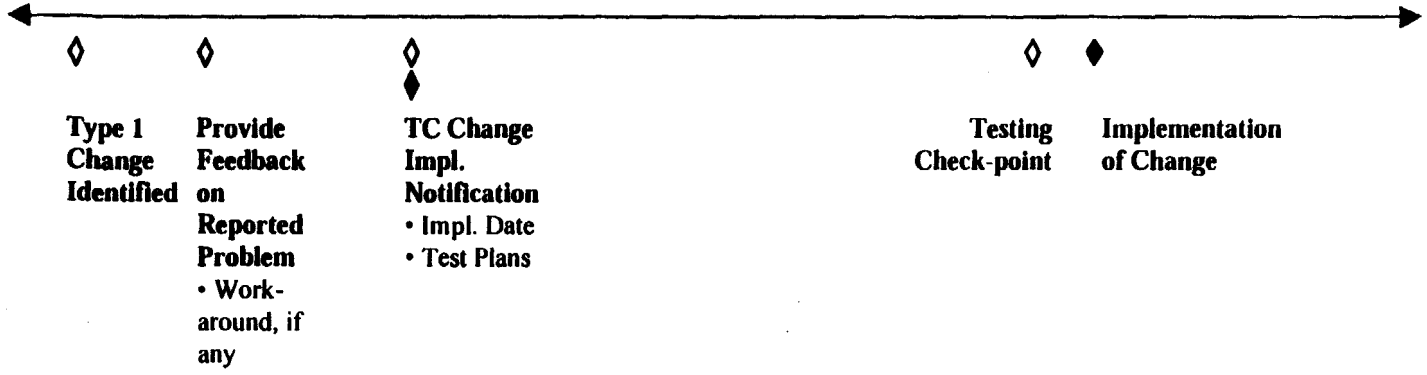
* The steps for a Type 1 change may be combined depending on the severity of the problem (see Type 1 definition for more details).

Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation

Operations Excellence

Timeline for a Typical Type 1 (Emergency Maintenance) Change

Typically hours or 1 to 2 days, maximum should be 30 days



Analysis - Finalization of the Change and determination of the impact to TC systems.
Schedule - Bell Atlantic determines the Implementation Date for the Change.
Development - Bell Atlantic systems are modified for the Change.
Current - The Change is the most current version at Bell Atlantic.

* The steps for a Type 1 change may be combined depending on the severity of the problem (see Type 1 definition for more details).

Legend
◊ - Information Exchange
♦ - Specifications Related Items
◊ - Implementation Notification
♦ - Implementation